

Rashik Tiwari

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[LinkedIn](#)

PROFESSIONAL SUMMARY

Motivated and detail-oriented Computer Science graduate student at the University of Delaware, with hands-on experience in autonomous vehicle systems, sensor integration, and data analysis through research at the Connected and Autonomous Research (CAR) lab. Proficient in programming, algorithm development, and software engineering, with a strong foundation in machine learning and computer vision. Demonstrated ability to manage complex projects, collaborate with multidisciplinary teams, and solve real-world technical challenges. Eager to apply academic knowledge and research experience to contribute to innovative projects and drive technological advancements in a dynamic, fast-paced environment. Actively seeking computer science-related roles that offer growth, learning opportunities, and meaningful contributions to society

EDUCATION

University of Indianapolis, Bachelor's in computer science (January 2020 - May 2023)

University of Delaware, Masters in Computer Science (August 2023 – Present)

SKILLS

- Programming Languages: Python, C/C++, JavaScript, PHP, Java
- Technologies: TensorFlow, PyTorch, OpenCV, ReactJS, Firebase, Amazon Web Services
- Robotics and Autonomous Systems: ROS, ROS2, CARLA, Autoware Universe
- Machine Learning: Regression, Neural Networks, Decision Trees
- Tools: Git, Docker, Podman
- Core Competencies: Data Structures, Algorithms, GUI, Data Mining, Object Oriented Programming, Architecture, Operating Systems
- Soft Skills: Leadership, problem solving, teamwork, highly motivated.

RESEARCH EXPERIENCE

- Autonomous Car Development - CAR Lab (August 2023 - Present)
 - Contributing to the development of L4 autonomous vehicles by mounting and activating sensors.
 - Analyzing and processing sensor data.
 - Installation and use of Autoware Universe in the vehicles.
- Autonomous Indoor Navigation Robot (August 2022 - May 2023)
 - Designed and implemented a self-navigating robot using ROS, capable of indoor navigation
 - Integrated OpenAI's ChatGPT for interaction to enhance user experience
- Stock Market Prediction Using Machine Learning(May 2022)
 - Deployed machine learning models for stock price predictions with real time comparisons.
 - Presented at Summer Research Institute Scholar's Showcase
- Performance Analysis of Operating Systems in Virtualized Environments(August 2022)
 - Conducted performance analysis of operating systems in virtual machines focusing on thread performance and reliability.
- Game theoretic approach for sensor optimization(December 2024)
 - Conducted research on how to optimize performance of sensors on different scenarios by using normal form and coalitional game theory.

WORK EXPERIENCE

Robotics Intern, *August Robotics*, Indianapolis, IN (June 2022 – December 2022)

- Updated, tested, and deployed floor-marking robots on-site.
- Diagnosed and resolved issues with robots.

- Created maps for convention halls and construction sites for floor-marking purposes.

Assistant Project Manager, *Team Office Hours, University of Indianapolis*, Indianapolis, IN (August 2022 – May 2023)

- Built a functional office hour application for students and professors.
- Engaged in regular client and advisor meetings.
- Debugged and solved problems and wrote user documentation.

Teaching Assistant,

Database Systems, University of Indianapolis (January 2023 – May 2023)

Data Structures, University of Delaware (August 2023 – Present)

Database Systems, University of Delaware (August 2023 – May 2024)

- Assist the professor in grading assignments, quizzes and exams.
- Provide guidance to students on course topics and assignments and help them with questions and concerns they have.
- Facilitated discussions and did lectures on different topics based on courses.

Web Development Intern, *Well Done Marketing*, Indianapolis, IN (June 2021 – August 2021)

- Developed and maintained websites for clients, including Duke Realty, CICF, Indiana Landmarks, MJ Insurance, Invest, and Goodman Campbell.
- Contributed to the launch of two websites and wrote code for upcoming sites.
- Gained experience in website content creation and marketing strategies

Social Media Ambassador/Graphics Designer, *Professional Edge Center, University of Indianapolis*, Indianapolis, IN (September 2021 – May 2023)

- Designed graphics and created posters for social media and events.
- Collaborated with career coaches to plan and execute events.
- Improved social media engagement and followers' count.